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ABSTRACT

A study of the involvement of continuing higher education in professional and occupational regulation should focus on the growth of practice regulation, roles of higher education, and issues and areas for cooperation in meeting the practitioners' needs. Knowledge obsolescence and the definition of more specific fields have led to a heightened need for professional regulation. States mandate most practice requirements, but adoption of licensing examinations developed at the national level and common requirements for licensure ensure general uniformity. Continuing education is increasingly considered useful in accomplishing such professional goals as (1) maintaining competency, (2) preparing for credentialing examinations, (3) qualifying for initial licensure or certification, (4) updating those practice areas, (6) enhancing job security and advancement, (7) supplying information in other areas relevant to practice, and (8) serving as a forum for professional exchange. Cooperation with other organizations and individuals is essential for developing and implementing continuing professional education. Professional organizations and practitioners can help identify problems and educational needs. Licensing boards and certifying agencies should receive input concerning new knowledge from institutions of higher education whose varying strengths and limitations in resources require cooperation in program development. (YLB)

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PROFESSIONAL AND OCCUPATIONAL PRACTICE REQUIREMENTS:

Some Implications for Continuing Higher Education

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Presented at The National Adult Education Conference

November 7, 1979

Boston, Massachusetts

It's not news to any of us, I'm sure, that the issue of professional and occupational regulation has become a hot topic in recent years, and one in which higher education, and especially continuing higher education, has become indirectly and directly involved in a number of ways. My purpose in talking with you this evening is to briefly review how we've gotten where we are today in the area of practice regulation, to examine the areas in which continuing higher education can and should have a significant role to play, and to look at some of the ways in which we can work cooperatively with other groups to maximize the likelihood of our meeting professional and occupational practitioners' educational needs.

We're talking about both professions and occupations. I don't want to get into the definitions and differences here, for that's another topic entirely. However, for the sake of less cumbersome discussion tonight, I'm going to use the term "professions" to refer to both occupations and professions. Since most every occupational group appears to be striving for professional stature, I trust that no one

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will be offended.

THE GROWTH OF PRACTICE REGULATION

Traditionally licensure was imposed only in those fields where it was deemed necessary to protect the health and welfare of the public. Once a license was issued it was considered to be good for the lifetime of the practitioner, fostering acceptance of the philosophy that a person entering a given field was possessed of lifelong competence in that area (Shimberg, 1977; Kalman, 1979). While this philosophy could perhaps be tolerated in a time when the body of knowledge in any given field was small and slow-growing, it's downright impractical today. For example, pharmacists educated twenty-five years ago were taught a manual art, that of compounding prescriptions. Today not only is pharmacy no longer a manual art, but new drugs and other pharmaceutical products are arriving on the market at the rate of 300 to 400 per year.

To put it in slightly different terms, in 1970 an electrical integrated circuit contained 256 bits, and today, due to a decade of developments in microelectronics, there are 16,384 bits in each circuit. In the same perspective, the electrical engineer who graduated from college ten years ago, unless he has since continued his education, is as obsolete as the 256 bit circuit.

Obsolescence is a constant threat in all areas, but especially in science and engineering and in the many other professions that are dependent upon the technological innovations and developments of

scientists and engineers. Although precise indices for predicting or evaluating the rate of change or decay of technical knowledge do not exist, estimates have been made using the "half-life" measurement. It has been estimated that the half-life of a 1940 engineering graduate's knowledge was twelve years, and that figure has shrunk to five years for the 1970 graduate. A half-life of five years has also been applied to a medical internist's knowledge, and to that of a dentist. Mercifully, no one has yet figured it out for continuing educators.

In short, new knowledge is being spewed forth at an unprecedented rate, raising very real, very serious, valid questions about the requirements both to enter and to remain in professional practice. Social workers in states where there is no licensure tell us that individuals from a wide variety of backgrounds are holding themselves out as "social workers." These individuals may have entered the social work field a number of years ago when it was less defined (and certainly less well organized), and through years of practice and perhaps education may have developed into top-flight practitioners--or they may not have. They may or may not have the up-to-date concepts and skills necessary to function successfully in their chosen role, but how's a layman like you or me to know this?

In addition to the knowledge explosion and the definition of more, and more specific, fields, there has also been a proliferation of professional regulation. Some of this increase can quite obviously be attributed to the desire of practitioners, consumers, and state governments to protect the public from incompetent operators. In other

cases, I have to say it appears that groups have sought licensure as a means of enhancing their status, although their formally stated reasons for seeking regulation have often been quite altruistic. Teachers in New York State, currently seeking licensure, unabashedly acknowledge a desire for professional status as one of their prime motivating forces (ProForum, 1979). Probably for this reason of questionable motivation more than for any other, if not exclusively, the entire issue of the need for and justifiability of professional licensure has become a controversial one, as I don't have to tell you. However, like the matter of defining "profession" and "occupation," it's something I'll not get into here in any detail. Suffice it to say that the rapid growth in knowledge in almost all areas, and similar rapid growth in the numbers of professions moving toward, adopting, increasing, or revising practice regulation, has brought the entire issue of licensure to the fore. How a person gets into a field and stays there has become an area of conflict within individual professions and between practitioners and the public (Frandson, 1975). The question of who should have how much control has been asked repeatedly. Licensing boards and the entire licensing system have been criticized for their failure to properly keep a watchful eye on those they license.

While most of this excitement takes place at the state level (and practice regulation is handled at the state level for the vast majority of professions), I have to point out that the fact that states hold the power to license and regulate various professions does not at all mean that the practice regulations dictated by state laws are unique in each state. A large number of licensing examinations are now developed at

the national level, and simply adopted by state regulatory agencies. The states may set the passing scores they deem acceptable, or may decide to supplement the national examination with a state developed component, but in more and more cases national examinations are gaining acceptance. Needless to say, this can be a real boon to practitioners seeking reciprocity.

A common requirement for licensure is graduation from an approved degree program or completion of an approved training program. Here again, national or at least regional accreditation or approval is generally the standard. Often a national committee or council, affiliated with the national professional association in the field, is given this responsibility. Similarly, participation in approved continuing education programs may be required for continued practice, and these programs are frequently approved by the national professional association or a group it designates.

It's quickly apparent, then, that even though the states mandate legal requirements for practice, these requirements do not vary as much from state to state as one might think.

If we look back a bit, we find that in the past the standard approach to controlling for at least a minimal level of competency was accreditation of professional and occupational schools. Later licensing of individual practitioners was adopted to effect further control in a number of fields. In fields where licensure was not adopted, or as a supplement to legal regulation, many professional associations

instituted voluntary certification of their members to formally recognize attainment of a level of competence. Most recently, a number of professions and occupations have added continuing education as a relicensure or recertification requirement. A number of professional associations have also instituted a continuing education requirement as a condition for membership. However, it's interesting to note that a recent Penn State study of physicians' attitudes toward continuing education indicates that, at least among those surveyed, the majority of medical practitioners are opposed to such a requirement for professional association membership (Mansfield et al., 1979).

The use of continuing education as a means of updating professionals, enabling them to maintain an acceptable level of competence and avoid obsolescence, is still in the trial and exploration stages. It's extremely difficult to establish evidence of a relationship between an individual's participation in continuing education and his or her increased knowledge, to say nothing of competence (Kalman, 1976; Shimberg and Roederer, 1978). I should acknowledge that there has been one study conducted that I'm aware of, to attempt to get at this issue (Morris, 1978). Albert Morris in California studied the relationship between what he termed "measurable job performance" of engineers and their continuing education participation. He found a positive relationship between the two factors, which could be good news for those of us in continuing education. However, I hasten to add that I don't think we can consider this single study a definitive answer to the question of whether continuing education really does help, much as I'd like to. Continuing

education units or accumulated clock hours of continuing education indicate only that an individual was present for a program. Academic credits earned through continuing education go a step further and serve as evidence that some learning may have taken place, but none of these forms of continuing education can guarantee improvement, or even change, in an individual's professional practice.

Now that we've admitted the weaknesses, let's look at the positive side. Despite our readily admitted inability to prove beyond reasonable doubt that continuing education participation does improve professional practice, a number of professional associations, individual practitioners, licensing bodies, and educators strongly believe that continuing education offers an individual the best opportunity to keep abreast of current knowledge in a given field; it may not be ideal, but it's the best we've got. It is perhaps this development that has recently produced the greatest impact on higher education and its relationship to professional practice requirements.

THE ROLES OF CONTINUING HIGHER EDUCATION

Having quickly skimmed over some of the events and thinking that led continuing higher education into the professional practice regulation arena, I'd like now to look at our role as related to continuing professional education.

If higher education is to help professionals meet their practice requirements, we have to know what these requirements are, and we have

to understand something about each professional area we are addressing. Toward these ends, Karen Manz and I, with the support of others at Penn State, have undertaken an ongoing study (Queeney and Manz, 1979). "Professional and Occupational Practice Requirements" is a part of the Continuing Professional Education Series initially undertaken at Penn State about five years ago by Marlowe Froke and Carl Lindsay. This particular segment of the Series has been designed to look at the requirements to enter and remain in the practice of a number of professions in Pennsylvania. We have reviewed approximately sixty professions to date, considering requirements for licensure and relicensure, certification and recertification. We are also gathering some background information on each profession we're studying and seeking useful facts and opinions on that profession's attitudes toward and perceived needs for continuing education. To gather these data, we've been talking with professional associations, licensing boards, educators in the specified fields, and practitioners. We've been from the veterinary hospital to the funeral home, to one of the nation's leading medical schools and to the local chiropractor. Our own continuing education has been extensive.

While the material we've been compiling focuses on Pennsylvania, it has relevance in other states as well for a couple of reasons. First, there are professional "philosophies" that come down from the national level and transcend state borders; what a profession is doing in one state is quite likely related to what it is doing in another state, as I've already indicated. Second, and I think more important, is the notion that what we're doing in this study, whether in the form we are

following or in another form, should be done by major providers of continuing higher education in other states if they are to successfully meet the educational needs of their state's practitioners. A recent article in The Chronicle of Higher Education addresses this issue to some extent, and includes a compilation by Louis Phillips of states requiring continuing education for practitioners in sixteen fields (Watkins, 1979).

A number of implications for the future of continuing education are emerging from this study. Virtually every profession we've investigated has indicated support of some kind of continuing education for its practitioners. Whether voluntary or mandatory, continuing education is viewed as a useful means of accomplishing a number of professional goals; continuing professional education for relicensure or recertification is only the tip of the iceberg. Continuing education has for some time been considered a means of obtaining current information in a given field, but our study is teaching us that professional and occupational practitioners also participate in continuing education for a number of other reasons along the way. Practitioners are using continuing education to help them maintain their competency, of course, whether as a mandatory requirement for relicensure or recertification or on a voluntary basis. However, a number of professions are also encouraging the use of continuing education as preparation for licensure or certification examinations; as a qualifying requirement for initial licensure, certification, or registration; to update practitioners who have been "grandfathered" into continued practice under new legislation; to provide additional

education as new practice areas develop within established fields; to obtain additional education which may contribute to job security and advancement; to supply needed information in areas related to, but not part of, the major area of interest; and to serve as a forum for professional exchange. I'd like to take a closer look at these applications of continuing education, for I do believe that we in higher education need to give some thought to each of them.

To Maintain Competency

While opponents of mandatory continuing education argue that continuing education participation is no guarantee of competence, and I think we all have to agree with that. few if any will deny that continuing education provides an opportunity for an individual to gain new knowledge that can be applied to make him or her a more competent practitioner, at least as far as we can tell. I add this caveat because, as Pottinger and others tell us, competency is extremely difficult to either define or measure (Pottinger, 1977). In some fields, practitioners feel the need for continuing education quite strongly and hence are motivated to participate voluntarily. Professional engineers, for example, cannot maintain a viable practice if their skills become obsolete, thus they're motivated to learn. Continuing higher education needs to find out what new knowledge and skills these professionals need, and to provide the appropriate educational programs. In other fields mandatory continuing education may be considered desirable to ensure practitioners' participation. Requiring that a practitioner continue learning is intended not only to

protect the public, but also to protect the practitioner. For example, the insurance field experiences an extremely high turnover of agents in Pennsylvania. The chief of our division of agents and brokers attributes this high attrition rate at least in part to agents' failure to keep up with a constantly changing industry.

To Prepare for Credentialing Examination

Before ever reaching the point of maintaining competence, applicants to practice in many fields are required to pass an examination to be licensed or certified. Continuing education courses are frequently of value in preparing to take these examinations. Such a course can not only review information that has been learned earlier, but it can also focus on specific areas covered by the examination or provide practice in taking an examination. For instance, architects have suggested that a course offering practice sessions or a "dry run" for the design portion of their licensing examination would be extremely useful. The high failure rate on this portion of the test is attributed largely to individuals' inability to pace themselves properly in the time allowed.

In some professions, an experience requirement must be met before an individual can sit for the licensing examination. In other professions, an individual must be licensed only if he or she has an independent practice, so someone working in industry, government, or as an educator in the field is exempt from this regulation. However, if this individual should decide to work as a consultant or to set up his

or her own business, licensure would be required. In cases such as these, where the licensure examination is taken after a few years of practice rather than directly upon completion of education or training, a good old fashioned review has real merit.

To Qualify for Initial Licensure or Certification

In some cases continuing education participation, perhaps in combination with other factors, may enable an individual to qualify for initial licensure, certification, or registration. Continuing education may be specifically required, or it may be used as a means of meeting more general education requirements. Persons wishing to enter the real estate field, for example, often meet the education requirement by successfully completing courses offered through continuing education. An individual having a degree in a field other than that which he or she wishes to enter may take continuing education courses to supplement the degree and meet specific content requirements for practice.

To Update Those Practicing Prior to Regulatory Legislation

In some cases such continuing education might be desirable for those already practicing. As our various states have passed legislation and implemented and revised regulations regarding who may practice in a given field, large numbers of individuals have been covered by a "grandfather" clause. These practitioners, practicing at the time of legislation, are granted licensure or certification without meeting the newly established requirements. Some of them may have had very little

or no formal education in their field, as has been the case in some states with licensed practical nurses. Such practitioners may find continuing education courses especially beneficial for learning some of the underlying theory and basic concepts central to their fields.

To Provide Education in New Practice Areas

Another consequence of knowledge growth and society's changing needs is the emergence of new practice areas within, or as off-shoots of, existing fields. The law enforcement field, where private security in a growing area, is an example. In this case, the demand for private security personnel is quite significant and is increasing rapidly, but because of the newness of the field there are few persons educated in it. Interested individuals in the law enforcement field could supplement their existing training in the direction of private security through continuing education courses.

This concept also has relevance for retraining, which I understand we've just begun to see. As some fields become overcrowded, individuals may elect or be forced to seek employment in other, related fields. This type of retooling might best be accomplished through continuing education.

To Enhance Job Security and Advancement

A related application of continuing professional education receiving increasing attention is its use to enhance job security and

improve opportunities for advancement. A formal degree is required for practice in a majority of professions, and there is a growing trend toward requiring a degree for employment where this has not previously been the case. This tendency may be viewed as a response to the expansion of knowledge in many fields and to the need for more educated practitioners. For example, an individual can become a registered nurse through a diploma program or an associate or baccalaureate degree program, but a proposal is currently under consideration to require a baccalaureate education of all new R.N.s by 1985. If this materializes, it is not unrealistic to expect that at least some less experienced diploma and associate degree nurses may view it as a threat to their job security and their opportunities for advancement.

The minimum educational requirements for police officers generally include a high school education and completion of a training program. However, a baccalaureate degree is seen as a desirable criterion for promotion in this field.

Education beyond that necessary to enter or remain in practice is required to attain certain professional levels or designations in some fields. For example, continuing education may be used to help a real estate agent move up to broker, or to qualify an insurance agent to pursue the Certified Life Underwriter designation.

Other practitioners too may decide to seek a degree at some time in their career, to improve their ability to do their job or to enable them to move ahead--or even for personal satisfaction. For these

individuals, continuing education may allow them to pursue a degree without disrupting their work schedules.

To Supply Information in Other Areas Relevant to Practice

Another type of information frequently sought and logically offered through continuing education is that dealing with areas related to professional practice but not addressing the specific subject area. In this category I include such things as office management for physicians, interpersonal skills for insurance agents, and teaching skills for librarians. Practitioners tell us that they often need these types of information, but don't get them in the normal course of their education so may fumble along for years without quite understanding why.

To Serve as a Forum for Professional Exchange

Just as practitioners can learn from continuing education courses, they can also learn from each other. In some professions, such as social work and interior design, continuing education programs can provide a forum for the exchange of ideas. By offering a loosely structured workshop keyed to timely topic and problem areas, continuing education can serve as a catalyst, bringing practitioners, educators, and others if desired, together to discuss various aspects of an issue or ways of handling a problem.

For these reasons I've discussed, and I expect for other reasons too, more and more practitioners in an ever increasing number of professions are requiring, requesting, needing, and just plain wanting supplemental education. Thus continuing higher education has an opportunity to provide a very real service to large segments of the population. There are opportunities for continuing professional educators to seriously evaluate continuing professional education needs, and to work cooperatively with professional associations, licensing boards, practitioners, and other institutions of higher education in providing the most effective continuing professional education. This brings me to the third and final area I wish to address, which is that of working cooperatively with other organizations and individuals in the development and implementation of continuing professional education.

ISSUES AND AREAS FOR COOPERATION

While continuing higher education has a great deal to contribute to professional education, we can't do it all alone. There's no way we can sit in our proverbial ivory towers and solve the educational problems of everyone from dieticians to attorneys. Good continuing professional education can be achieved only through a cooperative effort that includes professional associations, licensing boards, practitioners, educators, and other institutions of higher education. Today's colleges and universities unquestionably have the educational capabilities and subject matter expertise, and it is in these institutions that new knowledge most frequently comes to light. However, no institution of higher education of which I'm aware has expertise in all areas. More

importantly, the college or university alone cannot identify the problems and the educational needs of practitioners in a given field, and without making such an identification, how can we begin to say that what we're offering is worthwhile.

Professional Associations

Cooperation with professional associations is essential if we are to offer practice oriented continuing professional education. Work being done with pharmacists at Penn State has emphasized the importance of active participation of both professional groups and faculty experts in determining what kinds of programs are needed and in developing and implementing those programs. Penn State's Practice Audit Model for needs assessment and program development that has grown out of that study relies heavily on cooperative interaction between higher education and professional associations. Professional associations are able to provide a practical perspective and orientation that we can't match, yet they lack the theoretical background, educational expertise, and detached objectivity to successfully serve as providers of continuing education. Together higher education and professional associations can translate practitioners' needs into meaningful programs.

An example of the benefits to be derived from cooperation between an educational institution and a professional association are evidenced by a recent liaison formed in Pennsylvania. The Pennsylvania Society of Architects, which supports the American Institute of Architects' acknowledgement of the need for continuing education for registered

architects, believes that they must establish patterns of continuing education participation if they are to avoid having continuing education requirements imposed on them by outside agencies. Therefore the Pennsylvania Society of Architects recently designated one university within the state as the official educational institution for the organization of continuing education programs for architects in Pennsylvania. While other institutions are of course free to develop programs as they wish, the state professional association works with this university to identify relevant topics and to develop and implement seminars, workshops, and courses to meet architects' continuing education needs. In this way the Pennsylvania Society of Architects can provide the practical, ethical, and philosophical orientation, while the university can utilize the expertise of its faculty and its continuing education delivery systems to bring the most up-to-date information to licensed architects. Arrangements such as this one benefit the practitioner and the professional association, as well as the university involved.

Practitioners

Often working cooperatively with a professional association is considered synonymous with working with practitioners in a given field. However, for many of the occupations and professions that we have studied, a substantial number of practitioners did not belong to any professional organization. Some fields, such as insurance, have no single, representative organization that speaks for the body of practitioners. In other fields, including engineering, an umbrella

organization nominally represents practitioners from all disciplines within the field, but may be less closely in touch with individual practitioners and their thinking than the smaller, technical societies representing specific subject matter areas. In many other cases, practitioners simply feel that the professional organization does not represent their interests and thus they choose not to join.

For these reasons, talking to the association is not talking to the practitioner. Practitioners have something to say and they should be heard, for they are our ultimate clients, our students. Most practitioners are interested in and concerned about maintaining their competence, and they have valid, first hand observations that can help us provide the programs and information that they need and can use. In our study we encountered teachers who told us that university continuing education courses often give them too much theory and too little information that lends itself to practical application. Practitioners can also tell us simple operational things, such as that they prefer Wednesday nights for evening programs, that they won't travel more than fifty miles to a one day program, and they find lectures more useful than workshops.

Licensing Boards and Certifying Agencies

Cooperation with licensing boards and certifying agencies is less frequently discussed than our relationships with professional associations and practitioners. However, the business of these groups directly effects our work. Close ties between professional

organizations and these regulatory agencies have existed for some time, and thus professional organizations have had a large influence on the content of regulatory legislation. Increasingly, however, colleges and universities are being called upon for input, especially for those sections of the legislation dealing with education requirements for entry and continued practice in a professional area. While professional associations are in the best position to define the parameters, philosophy, and skills of their field, educators have the perspective to translate these needs into an educational framework to be included in legislation.

Regulatory agencies also can keep us abreast of what is happening in a given field. Regulations and requirements are changing frequently and rapidly, and because of this it would be all too easy to prepare a continuing education program to meet a requirement that is being phased out--without even knowing we are doing it.

Other Institutions of Higher Education

Not only do our institutions of higher education need to cooperate with other organizations and individuals; we also need to cooperate with each other in providing continuing professional education. The main consideration in such a joint venture is recognition of the strengths and limitations of each institution's resources. For example, one institution might have faculty with the technical expertise necessary to present a worthwhile program, while another might have the continuing education capabilities to deliver the program in locations where it is

needed. Such a cooperative venture was undertaken in Pennsylvania by Penn State and Westminster College, who together offered a reading specialist certificate program for teachers. Penn State provided the continuing education capabilities and some related courses, while Westminster provided the reading courses so essential to the program. This kind of cooperative effort for providing continuing professional education has great potential and many educational institutions, professional associations, and practitioners can benefit from this melding of choice resources, whether they are human or physical.

Consumers

One last group to whom higher education institutions relate in terms of their contributions to professional practice requirements is the consumers or users of all professional services. This relationship is an indirect one, but still very important. While it is not the role of higher education to educate the public about the many facets of professional education, the public needs to see the results in society of having competent professionals, and to be assured that the highest quality education is provided for these individuals. Higher education, by providing the most relevant and current information through continuing professional education, can help foster this quality. Also, through the development of research in the evaluation of competence, educational institutions can help professional associations, government, and society at large be assured of competence among practitioners.

CONCLUSION

As a conclusion to all of this, I have to say that the future of practice requirements and regulations is uncertain. In some states, where sunset legislation exists, we may see the decrease of such regulation. In other states, professional associations are trying to implement new licensure laws or amend old ones to provide for competency-related relicensure requirements. In Michigan, for example, the new Public Health Code provides for the reorganization of licensed health professions, including the establishment of means of assessing continuing competency over a practitioner's working life (State of Michigan, 1978).

Across states and across professions there is a great challenge for continuing higher education to interact and cooperate with other organizations and individuals to provide educational services as they relate to current practice requirements. There are many unexplored possibilities for cooperative efforts in meeting these needs. Providers of continuing professional education will be able to meet maximum efficiency and high standards of quality only by working with professional associations, practitioners, legislators, and other institutions of higher education, and with the continued support of the public at large.

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